

VERSION DESCRIPTION DOCUMENT FOR THE NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)

Release 4.8.1

NASA-NEMS-VDD-13

PrISMS Contract

May 15, 2001



National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Huntsville, AL 35812

**VERSION DESCRIPTION DOCUMENT FOR THE
NASA EQUIPMENT MANAGEMENT SYSTEM (NEMS)
RELEASE 4.8.1**

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

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GEORGE C. MARSHALL SPACE FLIGHT CENTER
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TABLE OF CONTENTS

Section	Page
1. INTRODUCTION	1-1
1.1 IDENTIFICATION OF THE RELEASE	1-1
1.2 PURPOSE OF THE RELEASE	1-1
1.3 SCOPE.....	1-1
1.4 CONTACT POINTS	1-2
2. FUNCTIONAL INFORMATION.....	2-1
2.1 FUNCTIONAL CHANGES.....	2-1
2.2 FUNCTIONAL INTERFACES.....	2-1
2.3 CRITICAL ISSUES.....	2-1
2.4 AFFECTED DOCUMENTS	2-1
2.5 APPLICATION SYSTEM ADMINISTRATION	2-1
3. TECHNICAL INFORMATION	3-1
3.1 TECHNICAL SYSTEM INTERFACES	3-1
3.2 DATA DICTIONARY CHANGES.....	3-1
3.3 SOFTWARE OBJECT CHANGES.....	3-1
3.4 DATABASE ADMINISTRATION	3-1
3.4.1 Release Dataset Names	3-1
3.4.2 Inventory of Objects	3-1
3.4.3 Storage Considerations.....	3-1
3.4.4 Installation Procedures.....	3-1
3.5 OPERATIONAL PREPARATION	3-1
4. KNOWN AND OPEN PROBLEMS	4-1

TABLE OF CONTENTS

Section	Page
APPENDIX A - ABBREVIATIONS AND ACRONYMS	A-1
APPENDIX B - GLOSSARY	B-1
APPENDIX C - FUNCTIONAL CHANGE VALIDATION PROCEDURES	C-1
APPENDIX D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS SOFTWARE RELEASE 4.8.1	D-1

1. INTRODUCTION

This Version Description Document (VDD) describes the changes and installation procedures for this release of the NASA Equipment Management System (NEMS). This section identifies the release, describes its purpose, defines its scope, and identifies its contact points.

1.1 IDENTIFICATION OF THE RELEASE

This software release is identified as NEMS, Release 4.8.1 and has an effective release date of May 15, 2001.

1.2 PURPOSE OF THE RELEASE

This release implements modifications for the following Change Control Requests (CCRs):

<u>CCR</u>	<u>Title</u>
280	SAG Upgrade (NEMS)

This release implements modifications necessitated by the following Discrepancy Reports (DRs):

<u>CCR</u>	<u>Title</u>
none	none

1.3 SCOPE

This VDD provides the functional and technical user of NEMS with information regarding the content, status, and structure of Release 4.8.1, including the following:

- Changes implemented since Release 4.7;
- Validation procedures to ensure the reliability of release changes;
- References to other documentation affected by this release;
- Detailed software installation instructions.

No waivers are associated with this release.

1.4 CONTACT POINTS

Sustaining Engineering for NEMS is provided through the Consolidation Center (CC) located at Marshall Space Flight Center (MSFC). Questions regarding the functional and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (Use following Key Words: SESAAS & NEMS)

Telephone: (256) 544-6673

Email: neal.cantrell@msfc.nasa.gov

FAX: (256) 544-1836

2. FUNCTIONAL INFORMATION

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

2.1 FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Software PREDICT changes related to this release.

2.2 FUNCTIONAL INTERFACES

This section is not applicable for this release.

2.3 CRITICAL ISSUES

This section is not applicable for this release.

2.4 AFFECTED DOCUMENTS

This section is not applicable for this release.

2.5 APPLICATION SYSTEM ADMINISTRATION

There are no application system administration changes associated with this release.

3. TECHNICAL INFORMATION

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration activities.

3.1 TECHNICAL SYSTEM INTERFACES

This section is not applicable with this release.

3.2 DATA DICTIONARY CHANGES

Refer to Appendix D, Section 4.0, for the data dictionary changes in this release.

3.3 SOFTWARE OBJECT CHANGES

Modules affected by this release are included in Appendix D, Section 2.2.

3.4 DATABASE ADMINISTRATION

This section describes the database administration activities for installation of this release.

3.4.1 Release Dataset Names

Refer to Appendix D, Introduction section, for the release dataset names.

3.4.2 Inventory of Objects

Refer to Appendix D, Section 2.1, for an inventory of Natural object types.

3.4.3 Storage Considerations

The changes represented by this release should not affect storage requirements.

3.4.4 Installation Procedures

Refer to Appendix D, Installation Instructions for NEMS Software Release 4.8.1 for detailed software installation procedures.

3.5 OPERATIONAL PREPARATION

Refer to the procedure described in Appendix D for assistance in preparing for proper installation and operational use of this release.

4. KNOWN AND OPEN PROBLEMS

There are no known or open problems related to this release.

APPENDIX A - ABBREVIATIONS AND ACRONYMS

CC	Consolidation Center
CCR	Change Control Request
CSC	Computer Sciences Corporation
DBA	Database Administrator
DR	Discrepancy Report
FAX	Electronic Facsimile Transmission
IRM	Information Resources Management
JCL	Job Control Language
MSFC	Marshall Space Flight Center
NACC	NASA Automated Data Processing (ADP) Consolidation Center
NASA	National Aeronautics and Space Administration
NEMS	NASA Equipment Management System
NPDMS	NASA Property Disposal Management System
SESAAS	Sustaining Engineering Support for Agencywide Administrative Systems
VDD	Version Description Document

APPENDIX B - GLOSSARY

Database Administration

Responsibility for maintaining the physical database environment.

Implementation

The process by which a NASA site installs a NASA software release and places it into operational use.

Operational Preparation

Preparation by a NASA site for installation and use of a NASA application release.

System Administration

Responsibility for administrative functions such as application security and table data maintenance associated with a NASA application.

APPENDIX C - FUNCTIONAL CHANGE VALIDATION PROCEDURES

Index of validation procedures for changes in this release:

Section	CCR	Title
1.0	280	SAG Upgrade (NEMS)

Details for the validation procedures follow:

1.0 CCR 280 – SAG Upgrade (NEMS).

New versions of SAG products are being installed.

Description of Change

Code was changed to accommodate the new versions of GSA products.

Functional Impact

There is no functional impact as a result of this CCR.

Validation Procedures

- Test all add, change and delete transactions.
Expected Results: There should be no errors.
- Test all reports.
Expected Results: There should be no errors.
- Test all adhoc.
Expected Results: There should be no errors.
- Test all tables.
Expected Results: There should be no errors.

<u>MODULE ID</u>	<u>MODULE NAME</u>	<u>TYPE</u>
<u>NEMS</u>		
RPT030P1	Monthly Transaction Statistical Summary	Program
RPT400P1	Financial Reconciliation Summary	Program
RPT752P1	Yearly Inventory Transaction Statistical Summary	Program
<u>PCM</u>		
TABLEC70	Add initial records to table C70	Program
TABLES02	Updates Error Message to Error Table S02	Program
TABLES06	Add initial records to PCM Report Table S06	Program
TABLE621	Add initial records to PCM Transaction Table 621	Program
TRNC00P1	Pending File Update Menu	Program

Appendix D - INSTALLATION INSTRUCTIONS AND CHECKLIST FOR NEMS SOFTWARE RELEASE 4.8.1

Introduction

Release information:

System Name: NEMS
Release Number: 4.8.1
Release Date: May 15, 2001
Effective Date: Immediately

In case of installation problems, contact the NASA Automated Data Processing (ADP) Consolidation Center (NACC) Technical Services Center (Use following Key Words: SESAAS & NEMS)

Telephone: (256) 544-6673
Email: neal.cantrell@msfc.nasa.gov
FAX: (256) 544-1836

The following datasets are located on the transient storage DASD volumes under the following data sets names:

xxMOV.NEMS.PROD.R481.R0501.DOC
xxMOV.NEMS.PROD.R481.R0501.SRC

Where "xx" is replaced by the appropriate NASA Center designation.

AR - ARC
DF - DFRC
GS - GSFC
HQ - HQ
J5 - JSC
KS - KSC
LA - LaRC
LE - GRC (Glenn)
MS - MSFC
SS - SSC

Installation Sequence

The sequence in which the installation of this release should occur is provided in the following list. A checklist is provided in section 9.0 to assist in tracking the installation of this release.

- 1.0 Back Up Existing Data
- 2.0 Copy Source/Object Code
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
- 5.0 Catalog Source Code
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods
- 9.0 Installation Checklist

1.0 Back Up Existing Data

It is advisable to back up all NEMS files as a precautionary measure prior to installation.

2.0 Copy Source

2.1 Copy Source Code

- A. Source code is installed in three separate libraries. Source code for programs modified in this release version were unloaded in the NATUNLD format, these programs all have specific destination libraries as shown below. All the NEMS programs have a destination of NEMS; NEMSINV programs have a destination of NEMSINV and NEMSPCM programs have a destination of NEMSPCM.

1. Load the NEMS source library from the dataset
xxMOV.NEMS.PROD.R481.R0501.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The NEMS programs:

- | | |
|-------------|--|
| 1. NEMS | Start-up Program |
| 2. RPT030P1 | Monthly Transaction Statistical Summary |
| 3. RPT400P1 | Financial Reconciliation Summary |
| 4. RPT752P1 | Yearly Inv Transaction Statistical Summary |

will be loaded to the application library NEMS, replacing any existing programs of the same name.

2. Load the NEMSINV source library from the dataset:
xxMOV.NEMS.PROD.R481.R0501.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The NEMSINV programs:

1. INV Inventory Start Up Program

will be loaded to the application library NEMSINV, replacing any existing programs of the same name.

3. Load NEMSPCM source library from the dataset:
xxMOV.NEMS.PROD.R481.R0501.SRC.

The source programs were unloaded using the Natural utility NATUNLD. The NEMSPCM Programs:

1. PCMMAP Start-up Map
2. TABLE621 Add Initial Records to Transaction
3. TABLEC70 Add Initial Records
4. TABLES02 Update Error Messages
5. TABLES06 Add Initial Records to Report
6. TRNC00P1 Pending File Update Menu

will be loaded to the application library NEMSPCM, replacing any existing programs of the same name.

The source module counts included in this release are listed below:

Natural Source Modules by Type	Count
GLOBAL DATA AREA	0
LOCAL/PARAM DATA AREA	0
MAPS	1
HELP ROUTINES	0
SUBROUTINES	0
SUBPROGRAMS	0
PROGRAMS	19
COPYCODE	0
TEXT	0
PROCESS	0
MISCELLANEOUS OBJECTS	0
Total:	20

2.2 List of Source Code Modifications

The following are the modules added, modified, and deleted.

Added Modules:

None

Modified Modules:

1. INV Program
2. NEMS Program
3. PCMMAP Map
4. RPT030P1 Program
5. RPT400P1 Program
6. RPT752P1 Program
7. TABLE621 Program
8. TABLEC70 Program
9. TABLES02 Program
10. TABLES06 Program
11. TRNC00P1 Program

Deleted Modules:

1. NEUXFRPA	Program
2. TABLEUPD	Program
3. TABLE34	Program
4. TABLE35	Program
5. TABLE37	Program
6. TABLE38	Program
7. TABLE39	Program
8. TABLEUPD (PCM)	Program
9. TABLE36 (PCM)	Program

3.0 Pre-Predict Data Conversion

Not applicable with this release.

4.0 Install Predict

Not applicable with this release.

5.0 Catalog Source Code

The following modules should be changed before the CATALL is run. Modules NEMS, INV000P0, and MNUC00P1 need to be modified at each center to contain the correct contact name and phone number for each center. Replace the ?? in **MSD008P1** and **MSD008P5** with your installation number.

Run a batch job to catalog (CATALL) all modules in the NEMS library using the NASA Batch Standard Parameters replacing the existing PS and LS with the following values: PS=23 and LS=80. It is not necessary to catalog the Global Data Area (GDA).

You should receive 38 NATURAL 0303 errors for modules that begin with RPT* that concern page overflow and 32 programs will produce NATURAL 0002 errors. Program **MSC005P1** will not compile. There should be a total of 71 NATURAL errors.

A list of errors found above and dispositions of these results follows:

- To compile the NATURAL 0303 errors correctly, run another CATALL for the RPT* modules in the NEMS library using the NASA Batch Standard Parameters. You should receive 12 NATURAL 0002 errors. Ignore the 0002 errors because these objects are dynamic.
- The 32 NATURAL 0002 errors from the first CATALL are to be IGNORED because these objects are dynamic.
- MSX001P1 will only compile for centers that use the NEMS-PRIOR-MONTH file.
- IGNORE any errors for program MSC005P1.

Run a batch job to catalog (CATALL) all modules in the NEMSINV library using the NASA Batch Standard Parameters replacing the existing PS and LS with the following values: PS=23 and LS=80. It is not necessary to catalog the Global Data Area (GDA). There should be no errors received.

Run an online catalog (CATALL) on module **TRNI34P1** and **TRNILOP3** to prevent problems with access to the second screen.

Run a batch job to catalog (CATALL) all modules in the NEMSPCM library using the NASA Batch Standard Parameters replacing the existing PS and LS with the following values: PS=23 and LS=80. It is not necessary to catalog the Global Data Area (GDA). See Section 9.0 Installation Checklist for instructions on how to correct these errors.

After all objects are compiled, the NEMS application will run under the NASA On-line Standard Parameters.

6.0 Post-Predict Data Conversion

Not applicable with this release.

7.0 Perform Release-Specific Procedures

There are no specific procedures for this release.

8.0 Local JCL Mods

There are no JCL modifications for this release.

9.0 Installation Checklist

- 1.0 Back Up Existing Data
- 2.0 Copy Source
 - 2.1 Copy Source Code
 - 2.2 List of Source Code Modules
- 3.0 Pre-Predict Data Conversion
- 4.0 Install Predict
- 5.0 Catalog Source Code
 - Update the Password to the NEMS-PCM-AUTH file in PCM programs:
MNUC00P1; MNUC01P1; RPTSUBP1; TRNC00P1; TRNC26P1; TRNC52P1;
TRNUPDP1. This step is optional if the Center chooses not to put a password on
the NEMS-PCM-AUTH file.
 - A. Find out from your DBA the ADABAS Security password assigned to the NEMS-
PCM-AUTH file at your installation.
 - B. Logon to the NEMSPCM and use the Scan utility to search the NEMSPCM
programs listed above for the word:
PASSWORD='NEMSPCM' and replace it with:
PASSWORD='Your site Password'. This scan and replace will change all
references to the password, found in the newly release NEMS Release Version
4.8.1 modules, with your installation's password.
- 6.0 Post-Predict Data Conversion
- 7.0 Perform Release-Specific Procedures
- 8.0 Local JCL Mods